KOSTYUCHENKO, E.V.

Simplified method for calculating the transformation of the forebay of low-head dams. Izv.AN Kir.SSR.Ser.est.i tekh.nauk 2 no.4:133-145 '60. (MIRA 14:8)

(Hydraulics)

KOSTYUCHENKO, E.V.

Dispersal of particles of non-bound soils falling into a flow
of liquid. Trudy Inst. vod. khoz. i energ. AN Kir. SSR no.4:85-99
'57.   (MIRA 10:12)
                              (Hydraulics)

Kostyuchenko, E. V.

112-1-352 D

Translation from: Referativnyy Zhurnal, Elektrotekhnika, 1957, Nr 1, p. 59 (USSR)

AUTHOR: Kostyuchenko, E. V.

TITLE: Evaluation of the Formation in the Flow of Gravel and Pebble Bars.
            (During the construction work of hydroelectric power stations.)
            (Otsenka formirovaniya v potoke graviyno-galechnykh otsypey)(Pri
            proizvodstve rabot po vozvedeniyu GES))

ABSTRACT;   Bibliographic entry on the author's dissertation for the degree of
            Candidate of Technical Sciences, presented to the Moscow Power
            Engineering Institute (Mosk. energ. in-t) Moscow, 1955.

ASSOCIATION: Moscow Power Engineering Institute (Mosk. energ. in-t, Moscow)

Card 1/1

KOSTYUCHENOK, B.M.; MATUSEVICH, N.Ya.

Effect of modern methods of general anesthesia on the course and outcome of lung resections. Eksp. khir. i anest. 7 no.6: 83-87 N-D '62. (MIRA 17:10)

1. Iz kliniki gospital'noy khirurgii No.1 (nachal'nik - prof. I.S. Kolesnikov) Voyenno-meditsinskoy ordena Lenina akademii imeni Kirova.

L 37655-66

ACC NR: AP6015602

where

$$\theta_0(x, \xi, \lambda) = \frac{1}{\pi} \frac{\sin \lambda^{1/2m}(x - \xi)}{x - \xi} .$$

is a spectral function of the operator $(-1)^m y^{(2m)}$. If operator L_0 is defined on the semiaxis $0 \le x < \infty$, then the same equation applies. The first theorem is proved by examining the equation for the resolvent kernel $K(x, \xi, \lambda)$ of operator $\widetilde{L}$:

$$\widetilde{K}(x, \xi, \lambda) = K_0(x, \xi, \lambda) + \int_{-\infty}^{\infty} K_0(x, s, \lambda) \ddot{P}\left(s, \frac{d}{ds}\right) \widetilde{K}(s, \xi, \lambda) ds,$$

where $K_0(x, \xi, \lambda)$ is the resolvent kernel of the operator $(-1)^m y^{(2m)}$ and $\widetilde{P}(x, d/dx)$ is an operator which contains all minor coefficients of operator $\widetilde{L}$. The theorems can be applied to the calculation of traces for singular operators of a high order. This paper was presented by Academician I. G. Petrovskiy on 17 January 1966. Orig. art. has: 9 formulas.

SUB CODE: 12/ SUBM DATE: 11Jan66/ ORIG REF: 003/ OTH REF: 005

Card 2/2

L 37655-66   EWT(d)   IJP(c)
ACC NR: AP6015602   SOURCE CODE: UR/0020/66/168/002/0276/0279

AUTHOR: Kostyuchenko, A. G.   41

ORG: Moscow State University im. M. V. Lomonosov (Moskovskiy gosudarstvennyy   B
universitet)

TITLE: The asymptotic behavior of the spectral function of a singular differential
operator of order 2m

SOURCE: AN SSSR. Doklady, v. 168, no. 2, 1966, 276-279

TOPIC TAGS: differential equation, mathematic operator, Fourier transform, wave
equation, parabolic differential equation, boundary value problem, mathematic matrix,
Green function, Cauchy problem

ABSTRACT: The formally symmetric differential equation

$$l(y) = (-1)^m y^{(2m)} + p_{2m-2}(x) y^{(2m-2)} + \ldots + p_0(x) y$$

is examined. It is defined over the entire axis or semiaxis. L_0 is a minimal
operator generated by $l(y)$ and has identical indices of error. L is its arbitrary
self-adjoint extension. It is shown that in each finite domain (x, ξ), when $\lambda \to \infty$
for the spectral function $0(x, \xi, \lambda)$ of any semi-bounded self-adjoint extension, the
equation

$$0(x, \xi, \lambda) = 0_0(x, \xi, \lambda) + o(1),$$

Card   1/2   UDC: 517.947.35

L 8517-65

ACCESSION NR: AP4045090

$$-L_o + L_i + q(x)$$

has a discrete spectrum and the number of eigenvalues $N(\lambda)$ that are smaller than λ has an asymptotic expression in the form

$$N(\lambda) \sim \frac{1}{(2\pi)^n \Gamma(n/2m+1)} \int_{q(x)<\lambda} q(x) \, (\lambda - q(x))^{n/2m} dx. \qquad (1)$$

Several corollaries of this theorem and an indication of its proof are given. This report was presented by I. G. Petrovskiy. Orig. art. has: 6 formulas.

ASSOCIATION: Moskovskiy gosudarstvenny*y universitet im. V. M. Lomonosova (Moscow State University)

SUBMITTED: 06Mar64   ENCL: 00

SUB CODE: MA   NR REF SOV: 004   OTHER: 002

Card 2/2

L 8517-65 EWT(d) Pg-4 IJP(c)/ESD(dp)/AEH(t)

ACCESSION NR: AP4045090

S/0020/64/158/001/0041/0044

AUTHOR: Kostyuchenko, A. G.

TITLE: Asymptotic distribution of the eigenvalues of elliptic operators

SOURCE: AN SSSR. Doklady*, v. 158, no. 1, 1964, 41-44

TOPIC TAGS: elliptic differential equation, operator equation, eigenvalue, asymptotic property

ABSTRACT: Asymptotic formulas are derived for arbitrary self-adjoint elliptic operators. These formulas are analogs of the formulas derived by Titchmarsh (Proc. London Math. Soc. v. 3, No. 10, 153, 1953) and others for the Schrodinger operator $-\Delta + q(x)$. In particular, it is shown that the elliptic operator

$$L = (-1)^m \sum_{k_1 + \ldots + k_n = 2m} A^{k_1 \ldots k_n}(x) \frac{\partial^{2m}}{\partial x_1^{k_1} \ldots \partial x_n^{k_n}} + L_1\left(x, \frac{\partial}{\partial x}\right) + q(x) -$$

Card 1/2

L 45809-65
ACCESSION NR AM4043734

without proofs. Main attention is given to concepts without excessive detail.
The book is intended for mathematicians, mechanical engineers, and physicists.
It contains much of value for students and graduate students.

TABLE OF CONTENTS [abridged]:

SUBMITTED: 06Feb64   SUB CODE: MA

NO REF SOV: 038   OTHER: 012
Card 2/2

L 46809-65 EWT(d)/T LIP(c)
ACCESSION NR AM4013734 BOOK EXPLOITATION S/

Vilenkin, N. YA.; Gorin, YE. A.; Kostyuchenko, A. G.; Krasnosel'skiy, M. A.;
Krein, S. G.; Maslov, V. P.; Mityagin, B. S.; Punin, YU. I.; Rutitskiy,
YA. B.; Sobolev, V. I.; Stetsenko, V. YA.; Faddeyev, L. D.; Tsitlandze, E. S.

Functional analysis (Funktsional'nyy analiz), Moscow, Izd-vo "Nauka", 1964,
424 p. biblio., index. Errata slip inserted. 17,500 copies printed. Series
note: Spravochnaya matematicheskaya biblioteka.

TOPIC TAGS: functional analysis, mathematics, operator equation, quantum
mechanics, Hilbert space, Banach space, linear differential equation

PURPOSE AND COVERAGE: This issue in a series of Handbooks of the Mathematical
Library contains much material grouped basically around the theory of
operators and operator equations. It presents the basic concepts and methods
of functional analysis, theory of operators in Hilbert space and in conical
space, the theory of nonlinear operator equations, the theory of standard rings
applied to equations in partial derivatives, to integral equations. A
separate chapter is devoted to the basic operator of quantum mechanics. Citing
of the theory of generalized functions takes up a large part of the book. The
book explains mathematical facts; theorems and formulas, as a rule, are given

Card 1/2

KOSTYUCHENKO A.G

KOSTIUCENKO, A.G.; MITEAGHIN, B.S.

Positive-definite functionals on nuclear spaces. Analele mat 17 no.1: 3-40 Ja-Mr '63.

32566

S/550.6./0 3.00...592 594

D25 /D30

Cauchy's problem for Sobolev- ...

satisfies the estimate $|u(x, t)| \leq C_\varepsilon e^{\varepsilon/|x|^\alpha}$ and $u(x, t)$ is a functional of the type of the functions in the neighborhood of P_0 = 0. There are 7 references: 4 Soviet-bloc and 3 non Soviet-bloc. The references to the English-language publications read as follows: L. Hörmander, On the theory of general partial differential operators, Acta math. 94, 1955, 161 - 248, A. Seidenberg, A new decision method for elementary algebra, Ann. of math. ... L. Hörmander, On the division of distributions ... für Math. no. 6, 1958, 555 - 568.

SUBMITTED: June 12, 1960

Card 5/5

S/059/6
D2517/D301

Cauchy's problem r Sobolev ...

The case when det P(σ) becomes zero for some real σ is then considered. In this case Cauchy's problem may not have a solution even for bounded initial functions. An example of this is used, and the following theorem is established. Theorem the problem (1) (2) fulfill the following conditions: 1) zeros of det $P(\sigma)$ are distributed in a finite region of the plane; 2) $\Lambda(\sigma) = \max_{1 \leq j \leq m} \mathrm{Re}\, \lambda_j(\sigma) \leq C$ and for sufficiently great there exists

a strip $|t| \leq C_1$ such that $\Lambda(\sigma + it) \leq$ in that strip 3) if det $P(\sigma'_0) = 0$ then as $\xi \to \sigma'_0$, $\Lambda(\xi) \to$ Then Cauchy's problem is correct in the class of initial functions x satisfying the following conditions: a) $u_q^{(q)}(x) \leq c_q e^{c|x|\cdot\alpha}$, where $\xi > 0$ is arbitrary, $|q| \leq r$ and $\alpha <$ b) in the neighborhood of the zeros of det $P(\sigma)$ the form $(\det P)^K \varphi$ where φ is a functional of the type of the functions, and the solution

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S/550/... /013/... /002/004
D251/D30?

Cauchy's problem for Sobolev- ...

$\leqslant p \cdot n \cdot 1$ and $a < d$, and the solution $u(x, t)$ in the case $p < 0$ has power increase not greater than 1 and in the case $p, \geqslant 0$, ... t)/ $\leqslant Ce^{a/x/}$. Here $\Lambda(\sigma) = \max \operatorname{Re} \lambda_j(\sigma) = C$ [Abstracter's note: Other symbols not explained]. Theorem 3: Cauchy's problem (1)(2) with the condition that

$$\det P(\sigma) \neq 0, \quad \Lambda(\sigma) \leqslant C_1/\sigma/^h \cdot C_2$$

where $h < 1$, is correct in the class of infinitely differentiable initial functions $u_0(x)$ which satisfy the conditions

$$/u_0^{(q)}(x)/ \leqslant C A^q q^{q\alpha} e^{b/x/^{\frac{\alpha}{\alpha - /p/}}} \quad (q \quad 0 \quad 1, 2 \quad \dots$$

where $1 < \alpha < 1/h$, and the solution

$$/u(x, t)/ \leqslant Ce^{b/x/^{\frac{h}{h \cdot /p/}}}$$

Card 3/5

Cauchy's problem for Sobolev- ...

S/5076/70/0/005/005/004
D251/D301

1) Det $P(\sigma) \neq 0$ for all real $\sigma = (\sigma_1, \ldots, \sigma_p)$; 2) Det $P(\sigma)$ coincides with zero for some real σ, where $P(\sigma)$ is the matrix with polynomial coefficients, obtained from $P(\partial/\partial x)$ by replacing $\partial/\partial x$ by σ. In the case when det $P(\sigma) \neq 0$, then there exi ts a region G, $\{s = \sigma + i\tau; |\tau| \leq C(1 + |\sigma|)^g\}$, in which also det $P(s) \neq 0$. The solution of Cauchy's problem (1) (2) with the condition that det $P(\sigma) \neq 0$ for real σ is unique in the class of functions $|x| \leq C_\varepsilon e^{|x|}$ for some $\varepsilon > 0$ if $p < 0$ and in the class of $C_\varepsilon e^{a|x|}$ if $p \geq 0$. A proof and discussion of this theorem follows. Theorem 2: For some ... Cauchy's problem ... with the conditions that det $P(\sigma) \neq 0$ and $A(\sigma) \leq 0$ ... in the ... initial functions $x(x)$ having an ... than ... $(n + 1)$ together with derivati ... of order ... In the case $p \geq$ ... Cauchy's problem ... initial functions (x) solu tion ...

Card 2/3

16.3500

S/358/6
D251/D301

AUTHORS: Kostyuchenko, A.G., and Eskin, G.I.

TITLE: Cauchy's problem for Sobolev Gal'pern equations

SOURCE: Moskovskoye matematicheskoye obshchestvo. Trudy.
             v. 10, 1961, 273 - 284

TEXT: The authors state that Cauchy's problem for a general system
of linear differential equations with constant coefficients which
is not a Kovalevskaya-type system, i.e. is not soluble with re-
spect to $\partial u/\partial t$ has the form

$$P(i\frac{\partial}{\partial x})\frac{\partial u}{\partial t} = P_1(i\frac{\partial}{\partial x})u \qquad (1)$$

$$u(x, 0) = u_0(x). \qquad (2)$$

where $x = (x_1, \ldots, x_n)$, $u = (u_1, \ldots, u_m)$ and P and P_1 are m order
matrices. In the current work uniqueness and correctness classes
are constructed for Cauchy's problem for the following cases:
Card 1/5

80040

Evaluation of the Resolvents of Singular
Elliptic Operators

S/020/60/132/01/07/064

Then the operator $\overline{L} = L_0 + \sum\limits_{l=0}^{2m-1} B_l\left(x, \dfrac{\partial}{\partial x}\right)$ has a complete system of

eigenfunctions and adjoined functions.
The author mentions M.V. Keldysh.
There are 5 Soviet references.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet imeni M.V. Lomonosova
              (Moscow State University imeni M.V. Lomonosov)

PRESENTED: December 28, 1959, by S.L. Sobolev, Academician

SUBMITTED: December 25, 1959

Card 4/4

Evaluation of the Resolvents of Singular
Elliptic Operators

$$(3) \quad \left| \frac{\partial^k H(x,y)}{\partial x_1^{k_1} \dots \partial x_n^{k_n}} \right| \le \frac{B_\mathcal{E} \; e^{-c|x-y|}}{g^{\frac{2m-k-\mathcal{E}}{2m}}(x)} \quad , \qquad \sum_{j=1}^{n} k_j = k \; , \quad k = 0, \dots, 2m-1$$

where $\mathcal{E} > 0$; $|x-y| \geqslant 1$; $c > 0$; $B_\mathcal{E}$ – constant. In the neighborhood of
$x=y$, $H(x,y)$ has the singularity of the fundamental solution. Theorem 2 :

Let the matrices $A^{k_1 \dots k_n}(x)$ be symmetrical, let a) and b) be satisfied ;
let $Q(x)$ satisfy (1). Let

$$B_1 \left(x, \frac{\partial}{\partial x}\right) = \sum_{m_1 + \dots + m_n = 1} B^{m_1 \dots m_n}(x) \; \frac{\partial^l}{\partial x_1^{m_1} \dots x_n^{m_n}} \quad ;$$

for the elements $b_{ij,1}(x)$ of B_1 , for $\delta > 0$ let be valid

$$(4) \quad |b_{ij,1}(x)| \le c \; g^{\frac{2m-1}{2m} - \delta}(x) \quad , \quad 1 = 0, 1, \dots, 2m - 1 \; .$$

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Evaluation of the Resolvents of Singular
Elliptic Operators

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satisfy the inequalities $\mathrm{Re}\ \lambda_i < -\delta$, where $\delta > 0$ and it does not depend on x, s; b) The matrix $Q(x) = \|q_{ij}(x)\|$ is symmetrical; its characteristic roots $\beta_k(x)$ are so that $\beta_k(x) \leq -g(x)$, where $g(x) \geq c\ |x|^\alpha + c_1$. Besides let the elements of :

$$A^{k_1 \ldots k_n}(x) \quad \text{and } Q(x) \text{ have 2m continuous de-}$$

rivatives, those of $A^{k_1 \ldots k_n}$ be bounded in R_n while

(1) $\quad |q_{ij}^{(k)}(x)| \leq c\ g^{\frac{2m+k}{2m}}(x)$, $i, j = 1, \ldots, N$.

Theorem 1 : Under the given assumptions there exists a number $\lambda_0 > 0$ so that the operator $(L_0 - \lambda_0 E)^{-1}$ is an integral operator the kernel $H(x, y)$ of which satisfies the estimation

Card 2/4

16.3500

AUTHOR: Kostyuchenko, A.G.

TITLE: Evaluation of the Resolvents of Singular Elliptic Operators

PERIODICAL: Doklady Akademii nauk SSSR, 1960, Vol. 132, No. 1, pp. 32-35

TEXT: Let

$$(2) \qquad L_0 = (-1)^{m+1} \sum_{k_1 + \cdots + k_n = 2m} A^{k_1 \cdots k_n}(x) \frac{\partial^{2m}}{\partial x_1^{k_1} \cdots \partial x_n^{k_n}} + Q(x) \quad ,$$

where $x = (x_1, \ldots, x_n)$, $-\infty < x_k < \infty$, $k = 1, 2, \ldots, n$; let $A^{k_1 \cdots k_n}(x)$

be the matrix $\| a_{ij}^{k_1 \cdots k_n}(x) \|$, $i, j = 1, 2, \ldots, N$. Let the following con-

ditions be satisfied : a) For real s, $|s|^2 = \sum_{k=1}^{n} s_k^2 = 1$ and arbitrary

$x \in R_n$ the characteristic roots $\lambda_i(s, x)$ of the matrix

$$(-1)^{m+1} \sum_{k_1 + \cdots + k_n = 2m} A^{k_1 \cdots k_n}(x)(is_1)^{k_1} \cdots (is_n)^{k_n}$$

Card 1/4

80074

S/020/60/131/06/006/071

Multidimensional Problem of Moments

with the index n_j, $j = 1, \ldots, k$, is a sequence of the type K. Then
it holds the representation

(7) $$T_{\iota} = \int_{R_k} \lambda_1^{n_1} \cdots \lambda_K^{n_K} \; d\,\zeta(\lambda)$$

where the measure G is uniquely defined.
A. N. Kolmogorov, Ye. Vul and Gel'fand are mentioned in the paper.
There are 10 references: 7 Soviet and 3 American.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet imeni M.V.Lomonosova
(Moscow State University imeni M. V. Lomonosov

PRESENTED: December 28, 1959, by S. L. Sobolev, Academician

SUBMITTED: December 25, 1959

Card 3/3

80074
S/020/60/131/06/006/071

Multidimensional Problem of Moments

$$T(x) = \int_{\xi_K} \sum_{n=-\infty}^{\infty} q_n \, e^{i(n,\vartheta)} \, d\sigma(\vartheta) \quad , \quad (x,\vartheta) = \sum_{\ell=1}^{K} n_\ell \, \vartheta_\ell ,$$

where σ is a uniquely defined measure on the k-dimensional torus S^k.
Definition: The sequence s_n, $n = 0, 1, \ldots$ $(s_n > 0)$ is called
sequence of the type K, if

(4) $\int_{0}^{\infty} \frac{\log S(x)}{x^2} \, dx \ldots \qquad \ldots \qquad \sup_{n \geq 0} \frac{x^n}{s_n}$

Theorem 7: Let T_n, $n = (n_1, \ldots, n_k)$ be a k-fold sequence for which

a.) $\sum_{} \ldots 0$, where ξ_n, $n = 0, 1, \ldots, N$ is an arbitrary
finite set of numbers b.) For every m the sequence

$$\ldots = \sum_{n_i = c, 2n_i} 1_{n_1, \ldots, n_k}$$

Card 2/3

80074

S/020/60/131/06/006/071

AUTHORS: Kostyuchenko, A. G. Mityagin, B. S.

TITLE: Multidimensional Problem of Moments

PERIODICAL: Doklady Akademii nauk SSSR, 1960, Vol. 131, No. 6,
pp. 1249-1252

TEXT: A continuous linear functional T on the algebra Φ with the involution $q \to q^*$ is called positive-definite, if $T(\,q\,q^*\,) \geq 0$ for all $q \in \Phi$.

The authors use the general method represented by them in (Ref.1,2) (integral representation of positive-definite functionals on kernel spaces) in order to formulate in ten theorems several properties of the positive-definite functionals on sequence spaces.

Theorem 5: Let Φ be an algebra of k-fold sequences $\{\,q_{(n_1, \ldots, n_k, \ldots, n_k)},\; n_i = 0, \pm 1, \ldots \}$ with the multiplication $(q\,q')_n = \sum_{i+j=n} q_i\,q'_j$ the involution $(q^*)_n = \bar{q}_{-n}$ and any kernel topology in which the multiplication is continuous; let Φ contain all finite sequences. Then every positive-definite functional T on Φ has the representation

Card 1/3

4

68793

Positively Defined Functionals on Nuclear Spaces   S/020/60/131/01/002/060

As an example the authors investigate in detail the represen-
tation of positive definite functionals in S_α^β (see $/$ Ref 8 $/$).
Altogether there are given 7 theorems. I.M.Gel'fand, Sya Do-shin,
N.Ya. Vilenkin, Ye,B. VU1, S.N. Bernshteyn, and M.G. Kreyn are
mentioned in the paper.
There are 10 references, 8 of which are Soviet, and 2 French.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet imeni M.V. Lomonosova
(Moscow State University imeni M.V. Lomonosov)

PRESENTED: November 10, 1959, by S.L. Sobolev, Academician

SUBMITTED: November 4, 1959

Card 4/4

68793

Positively Defined Functionals on Nuclear Spaces   S/020/60/131/01/002/060

Definition : A continuous functional T is positive definite on a kernel algebra with involution, if $T(x \circ x^*) \geqslant 0$ for all $x \in \phi$.

Properties : 1. $A(x \circ y) = A x \circ y = x \circ Ay$ 2. the character operator is real, i.e. $(Ax)^* = Ax^*$. 3. The ring $\mathcal{O}$ of the character operators is commutative. 4. The subring ϕ_* of all Hermitean elements (i.e. with $x = x^*$) is dense in $\mathcal{O}$. 5. Every positive definite functional is real, i.e. $T(x^*) = \overline{T(x)}$.

Under certain assumptions there holds the representation

$$(2) \qquad T(x) = \int_{-\infty}^{\infty} \overline{(\mathcal{X}_\lambda , x)} d\sigma(\lambda)$$

for positive definite functionals, where $\mathcal{X}_\lambda$ are multiplicative functionals and $\sigma(\lambda)$ is uniquely determined under certain further assumptions. The authors consider a class of kernel algebras with involution in which the above mentioned commutativity condition, which is difficult to verify, is always satisfied.

Card 3/4

68793

Positively Defined Functionals on Nuclear Spaces   S/020/60/131/01/002/060

$$(1) \quad (\varphi, \psi) = \sum_{\alpha} \int \overset{\infty}{\underset{-\infty}{\cdots\cdots}} \int (\overline{\chi_{\lambda_1 \cdots \lambda_n}, \varphi}) \, (\chi_{\lambda_1 \cdots \lambda_n}, \psi) \, d\sigma_\alpha'(\lambda_1, \ldots, \lambda_n),$$

where $\sigma_\alpha'(\lambda_1, \ldots, \lambda_n)$ is a system of finite measures in the n-dimensional space. If the system of commutating operators in its totality possesses a simple spectrum, then it is

$$(1^a) \quad (\varphi, \psi) = \int \overset{\infty}{\underset{-\infty}{\cdots\cdots}} \int (\overline{\chi_{\lambda_1 \cdots \lambda_n}, \varphi}) \, (\chi_{\lambda_1 \cdots \lambda_n}, \psi) \, d\sigma'(\lambda_1, \ldots, \lambda_n)$$

Definition : A complete linear topological space ϕ is called kernel algebra (ring) with involution, if ϕ is a kernel space and if a commutative multiplication x o y and an involution $x \to x^*$, which are continuous in the topology of ϕ , are defined on ϕ .

Definition: A continuous operator A on a kernel algebra with involution is called character operator, if $Ax \, o \, y^* = x \, o \, (Ay)^*$ holds for arbitrary $x, y \in \phi$.

Card 2/ 4

68793

16(1) 16 4600

S/020/60/131/01/002/060

AUTHORS: Kostyuchenko, A.G., Mityagin, B.S.

TITLE: Positively Defined Functionals on Nuclear Spaces

PERIODICAL: Doklady Akademii nauk SSSR,1960,Vol 131, Nr 1 pp 13-16 (USSR)

ABSTRACT: Let a continuous Hermitean form (φ,ψ) be given in the linear topological nuclear space ϕ. Let ϕ be completed to a complete Hilbert space H under consideration of this scalar product. Then it is (see $/$ Ref 6_7) $\phi \subset H \subset \phi'$, where ϕ' is the conjugate space of ϕ. Let the system $A_1, A_2, \ldots, A_n$ of symmetric operators in ϕ which possess self-adjoint commutating extensions in H be considered. Theorem 1 : If the system $\{A_i\}$ of symmetric operators possesses self-adjoint mutually commutating extensions in H, then this system possesses a complete system of general eigenfunctionals $\chi_{\lambda_1, \ldots, \lambda_n}$ over ϕ, and it holds the representation

Card 1/4

KOSTYUCHENKO, A.G.; MITYAGIN, B.S.

Positively defined functionals on kernel spaces. Trudy Mosk.mat.
ob-va 9:283-316 '60. (MIRA 13:9)
(Functional analysis)

69481

S/055/59/000/05/014/020

On the Principle of the Limit Amplitude

where $u(x)$ is the solution of the equation

(1) $\qquad Lu - w^2u = -f(x)$.

(Principle of the limit amplitude).
Another possibility of determining the solution of (1) shows the principle of the limit absorption (see (Ref.1,3)). For this purpose the authors consider the equation $Lu - \lambda^2u = -f(x)$, where $\lambda^2 = w^2 + i\varepsilon$, $\mathrm{Im}\,w = 0$, and prove that $\lim_{\varepsilon\to 0} R_\lambda$ exists, where R_λ is the unique resolvent.
J. G. Petrovskiy is mentioned in the paper.
There are 7 Soviet references.

SUBMITTED: July 3, 1958

Card 2/2

69481

16.3500   S/055/59/000/05/014/020

AUTHORS: Bass, G. J., Kostyuchenko, A. G.

TITLE: On the Principle of the Limit Amplitude

PERIODICAL: Vestnik Moskovskogo universiteta. Seriya matematiki,
             mekhaniki, astronomii, fiziki, khimmi, 1959, No. 5,
             pp. 153-164

TEXT: Let the Cauchy Problem

(2) $\dfrac{\partial^2 V}{\partial t^2} + L\left(\dfrac{1}{i}\dfrac{\partial}{\partial x}\right)V = f(x)\, e^{i\omega t}$

(3) $V(x,\ 0) = \dfrac{\partial V(x,0)}{\partial t} = 0$,

be considered, where $x = (x_1,\ \dots,\ x_n)$, $L\left(\dfrac{1}{i}\dfrac{\partial}{\partial x}\right)$ a positive operator
$(L(s) \geqq 0$ for real s), $f(x)$ a finite and sufficiently smooth function;
let $L(s)$ be a homogeneous polynomial of degree 2m.
Theorem 1: Let $n > 2m$. Then in every finite domain there exists uni-
formly with respect to x the boundary value

$\lim\limits_{t \to \infty} V(x,t)e^{-i\omega t} = u(x)$,

Card 1/2

A.G. Kostyuchenko

16(1)

AUTHORS: Skoryy, I.A., University Lecturer, and   SOV/55-58-2-33/35
Koptsov, V.D., Scientific Assistant

TITLE: Lomonosov - Lectures 1957 at the Mechanical-Mathematical
Faculty of Moscow State University (Lomonosovskiye
chteniya 1957 goda na mekhaniko-matematicheskom fakul'tete
MGU)

PERIODICAL: Vestnik Moskovskogo Universiteta. Seriya matematiki, mekhaniki,
astronomii, fiziki, khimii, 1958, Nr 2, pp 241-246 (USSR)

ABSTRACT: The Lomonosov lectures 1957 took place from October 17 -
October 31, 1957 and were dedicated the 40-th anniversary
of the October Revolution.

16. A.D. Gorbunov, Lecturer and B.M. Budak, Lecturer:
Difference Methods for the Solution of Hyperbolic
Equations.

17. N.S. Bakhvalov, Lecturer and B.V. Budak, Lecturer: Number of Calculation Operations for
the Solution of Elliptic Equations.

18. V.I. Lebedev, Aspirant: Difference Method for the
Solution of the Sobolev-System.

19. Professor Ye.B. Dynkin: Markov Processes and Semigroups.

20. A.G. Kostyuchenko, Candidate of Physical-Mathematical
Sciences: Decomposition of Differential Operators With
Respect to Generalized Eigenfunctions.

21. Ya.A. Roitain, Candidate of Physical-Mathematical Sciences:
Foundations of the Theory of Spherical Harmonics on Mani-
folds.

22. I.M. Borok, Aspirant: General Properties of Partial
Evolution Systems.

23. V.A. Il'yashenko, Candidate of Physical-Mathematical
Sciences: On Constructive Mathematical Analysis.

24. P.L. Ul'yanov, Lecturer: Reversal of Terms in Trigono-
metric Series.

25. I.G. Petrovskiy, Academician and Ye.M. Landis, Senior
Scientific Assistant: On the Number of Boundary Cycles
of a Differential Equation of First Order With a Rational
Right Side.

The contents of all the lectures have already been published.

Card 5/5

HORMANDER, Lars; FRANK, L.S.[translator]; BOROK, V.M., red.;
        KOSTYUCHENKO, A.G., red.

[Theory of general partial differential operators] K teorii ob-
shchikh differentsial'nykh operatorov v chastnykh proizvodnykh.
Pod red. V.M.Borok i A.G.Kostiuchenko. Moskva, Izd-vo inostr.
lit-ry, 1959. 131 p. Translated from the English. (MIRA 15:5)
                    (Calculus, Operational)

On the Spectral Properties of Self-Adjunct Elliptical Operators. 20-1-8/5 4

are limited in the entire R_n (just as their derivatives).

b) It is assumed that the matrices $A^{k_1 \ldots k_n}(x)$ are symmetrical. The operator L is formally symmetric in the sense of differential expressions.

c) The third condition concerns the characteristic roots. D_L signifies here the definition domain of the operator L. Then, among others, the following applies:

Theorem 1: When the operator satisfies the conditions (a), (b), (c) and is half restricted to D_L, such a real number λ_0 exists, so that for the kernel of the resolvent $K(x,y,\lambda_0)$ the initially described inequation is satisfied.

Theorem 2: When the operator L satisfies the conditions (a), (b), (c) and is half restricted to D_L it has the deficiency index (0,0).

Thereafter 2 further theorems are given and proved. There are 7 Slavic references, no figures.

ASSOCIATION: Moscow State University imeni M.V.Lomonosov (Moskovskiy gosu-darstvennyy universitet imeni M.V.Lomonosova)

PRESENTED: January 19, 1957 by A.N.Kolmogorov, Academician

SUBMITTED: January 19, 1957

AVAILABLE: Library of Congress

Card 2/2

KOSTYUCHENKO, A.G.

AUTHOR: Kostyuchenko, A.G.

20-1-8/54

TITLE: On the Spectral Properties of Self-Adjunct Elliptical Operators. (O spektral'nykh svoystvakh samosopryazhennykh ellipticheskikh operatorov)

PERIODICAL: Doklady Akademii Nauk SSSR, 1957, Vol. 115, Nr 1, pp.34-37 (USSR)

ABSTRACT: In the present paper the inequation $\int_{-\infty}^{\infty} K^2(x,y,\lambda_0) \, dy$ C is obtained, (where the constant C is independent of x) for a fairly large class of elliptical operators. The author further establishes a statement on the index of the deficiency of such operators. The author investigates the following operator in the space of the N-dimensional vector functions

$$L = \sum_{k_1+\ldots+k_n = 2m} A^{k_1\ldots k_n}(x) \frac{\partial^{2m}}{\partial x_1^{k_1}\ldots \partial x_n^{k_n}} + T, \text{ where } x = (x_1,\ldots,x_n),$$

$-\infty < x_1 < \infty$. $A^{k_1\ldots k_n}(x)$ signifies the matrix $\|a_{ij}^{k_1\ldots\ldots k_n}(x)\|$,

$i,j = 1,2,\ldots,N$. T signifies here a linear differential operator with the order $< 2m$. First several conditions are given:

a) the coefficients $a_{ij}^{k_1\ldots\ldots k_n}(x)$ have 2m continuous derivatives limited in the entire space R_n. The coefficients in the case of the lowest derivatives have derivatives of first order and they

Card 1/2

20-2-4/60

On the Behavior of the Eigenfunctions of Selfconjugating Operators

ASSOCIATION: Moscow State University imeni M. V. Lomonosov
(Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova)

PRESENTED: December 10, 1956, by S. L. Sobolev, Academician

SUBMITTED: December 7, 1956

AVAILABLE: Library of Congress

Card 3/3

20-2-4/60

On the Behavior of the Eigenfunctions of Selfconjugating Operators

This **kernel** is assumed to satisfy the condition

$$\int |K^2(x,y)|\, dy < C,$$ for nearly all x, where the constant C does not depend on x. In this case, nearly all (with respect to $\sigma_\alpha(\lambda)$) eigenfunctions $dE_\lambda\, g^{(\alpha)}/d\sigma_\alpha(\lambda)$ are restricted with respect to x. Three corollaries are given to this theorem. If the resolvent R_{λ_0} in the point λ_0 is an integral operator with a Karleman-kernel (?), then also E_λ f is an integral operator with the kernel $\vartheta(x,y,\lambda)$.

Theorem 2: If the operator $-y'' + q(x)y = \lambda y$ is a resolvent with a certain property given here, then the spectral kernel $\varphi(x,y,\lambda)$ is restricted for nearly all λ with respect to $\sigma(\lambda)$.

In conclusion, the Schroedinger equation in the entire space R_3 is given as an example and investigated:

$$-\Delta u + q(x)\, u = \lambda u, \quad x = (x_1, x_2, x_3), \quad q(x) > c_0 > -\infty.$$

There are 6 references, 5 of which are **Soviet**.

Card 2/3

O Povedenii Sobstvennykh Funktsii Samosopriazhennykh Operatorov. (In SSSR Dokl, ... In Russian. Study of the behavior of eigenfunctions of self-adjoint operators.

MT

Card 1/3   operator $R_{\lambda_0} f = \int_{-\infty} K(x,y)f(y)dy$ with the kernel $K(x,y)$.

KOSTYUCHENKO, A. G. Cand Phys-Math Sci -- (diss) "On eigenfunctions of self-adjoint operators." Mos, 1957. 7 pp 20 cm. (Mos. State Univ im Lomonosov), 125 copies.

(KL, 24-57, 115)

-4-

Les A. en déduisent un résultat de „diagonalisation" de A [cf. des résultats plus précis dans les travaux de Mautner et Gårding; cf. notamment Gårding, Applications of the theory of direct integrals of Hilbert spaces to some integral and differential operators, Univ. of Maryland, 1954 [MR 17, 192 c); on trouvera d'autres indications bibliographiques]. Exemples: A est un opérateur différentiel sur R ou sur de elliptique ou non; certains espaces e sont construits à partir des propriétés de croissance des coefficients de A. Généralisation à $A + \lambda B$, $B > 0$.   *J. L. Lions* (Nancy).

KOSTYUCHENKO, A. G.

Gelfand, I. M., and Kostyučenko, A. G. Expansion in
eigenfunctions of differential and other operators.
Dokl. Akad. Nauk SSSR (N.S.) 103 (1955), 349-352.
(Russian)
Notations. Φ = espace de Fréchet de fonctions indéfini-
ment différentiables sur R^n, Φ' = dual de Φ, on suppose
Φ⊂Φ'. On donne sur Φ une forme sesquilinéaire (φ, ψ)
définie positive continue; soit $\bar{\Phi}$ le complété de Φ pour
cette structure, on a Φ⊂$\bar{\Phi}$⊂Φ'. Soit A opérateur linéaire
continu de Φ dans Φ avec $(A\varphi, \psi) = (\varphi, A\psi)$ pour tout φ,
ψ ∊ Φ. On suppose qu'il existe A, hypermaximal dans $\bar{\Phi}$,
d'ensemble de définition contenant Φ, avec $A\varphi = A\varphi$
pour tout φ ∊ Φ. Soit A' le transposé de A dans Φ'. Un
élément T de Φ' est dit "fonction propre généralisée" si
$A'T = \lambda T$, λ ∊ C. Théorème: Sous les hypothèses ci dessus,
il existe un système complet de fonctions propres géné-
ralisées.

Moscow State Univ. im. M. V. Lomonosov

KOSTYUCHENKO, A. G.

USSR/ Mathematics

Card   1/1   Pub. 22 - 3/46

Authors   : Kostyuchenko, A. G.

Title   : On the singularity of the solution of the Cauchy problem and the mixed problem of certain systems of linear equations in partial derivatives

Periodical : Dok. AN SSSR 103/1, 13-16, Jul 1, 1955

Abstract   : A justification of the applicability of Gelfand and Shilov's method to proving singularity of the solution of Cauchy's problem and the mixed problem of certain systems of linear equations with variable coefficients is shown. Gelfand and Shilov developed a new method for proving the singularity of the solution of Cauchy's problem dealing with some systems of linear equations of the following type:

$$\frac{\partial u}{\partial t} = P\left(\frac{\partial}{\partial x}\right)u, \quad u(x,0) = u_o(x).$$

Six references: 1 Fr. and 5 USSR (1944-1955).

Institution : Moscow State University imeni M. V. Lomonosov

Presented by: Academician A. N. Kolmogorov, March 8, 195

KOSTYUCHENKO, A.G., student IV kursa.

A Liouville theorem. Stud.nauk.pratsi no.16:13-19 '55.   (MLRA 10:2)
(Geometry, Differential)

Periodical : Dok. AN SSSR 98/1, 17-20, Sep 1, 1954

Card 2/2 : Pub. 22 - 4/44

Abstract : where $u(x,t)$ is a vector-function $P(L,t)$ is a matrix the
elements of which are polynomials of Sturm-Liouville's
operators. Five references (1946-1954).

KOSTYUCHENKO, A.G.

USSR/ Mathematics - Cauchy's theorem

Card 1/2   : Pub. 22 - 4/44

Authors   : Kostyuchenko, A. G.

Title   : Cauchy's theorem (problem) for a linear system of equations with partial derivatives and differential operators of Sturm-Liouville's type

Periodical   : Dok. AN SSSR 98/1, 17-20, Sep 1, 1954

Abstract   : An answer is sought to the question concerning the singularity and, for some class of functions, even the existence of a solution by the Cauchy theorem expressed by the system of equations

$$\frac{\partial u}{\partial t} = P(L,t)u$$

with the initial conditions:

$$u(x,0) = u_0(x); \quad \frac{\partial u}{\partial x}\bigg|_{x=0} = 0,$$

Institution : Kiev State University im. T. G. Shevchenko

Presented by: Academician A. N. Kolmogorov, May 31, 1954

KOSTYUCHENKO, A. G.
USSR/Mathematics - Cauchy problem   FD-1167

Card 1/1   Pub. 118-8/30

Author   : Kostyuchenko, A. G., and Shilov, G. Ye.

Title   : Solution of the Cauchy problem for regular systems of linear equations
                in partial derivatives

Periodical   : Usp. mat. nauk, 9, No 3(61), 141-148, Jul-Sep 1954

Abstract   : The definition of a regular system of linear equations in partial deriva-
                tives was given by I. M. Gel'fand and G. Ye. Shilov in their article
                "Fourier transformations of rapidly increasing functions, and the problems
                of uniqueness of the Cauchy problem," Usp. mat. nauk, 8, No 6(58), 1953.
                The author in this present work demonstrates the theorem of the existence
                of the Cauchy problem in the classical sense under ordinary conditions.
                He considers the system of linear equations in partial derivatives: $u_t =$
                $L(pD, t)u$ where $u = u(x, t)$ is the desired m-dimensional vector function
                with components $u_1(x, t),.., u_m(x, t)$, $x = (x_1,..,x_N)$, $p = 1/2\pi i$, $D = d/dx$,
                and L is a matrix composed of linear differential operators with coef-
                ficients depending upon only t. Five references, one French and 4 USSR
                (e.g. "Evaluations of the solutions of parabolic systems and some of
                their applications," Mat. sbor., 33(75), No 2, 1953, S. D. Eydel'man).

Institution :

Submitted   : January 6, 1954

(3)

Kontyučenko, A., and Skorohod, A. On a theorem of N. K. Bari. Uspehi Matem. Nauk (N.S.) 8, no. 5(57), 165–166 (1953). (Russian)

N. Bari showed that if $\{\varphi_n\}$ and $\{\psi_n\}$ are orthonormal systems in Hilbert space, and if $\sum |\varphi_n - \psi_n|^2 < \infty$, then both systems are complete if one is. The authors reprove this theorem in a neat and straightforward manner. The result is applied to the proof that the orthonormal solutions of certain Sturm-Liouville systems are complete.

B. Gelbaum (Minneapolis, Minn.).

10-28-52 LL

KOLTYUCHENKO, A. G.

Koltyuchenko, A. G. On a connection between the structure of an $(n-1)$-dimensional surface and its principal curvatures. Uspehi Matem. Nauk (N.S.) 8, no. 5(57), 161-164 (1953). (Russian)

The main results are: If on a hypersurface in E^n one of the principal curvatures is a the constant value $\lambda > 0$, then the surface is the envelope of an $(n-2)$-parameter family of spheres with radius λ^{-1} (for $\lambda = 0$ the spheres have to be replaced by planes. There is no surface on which two of the principal curvatures have constant values which are different from each other and from 0 (the case where one of two constant principal curvatures vanishes occurs on cylindrical surfaces). If at every point of the hypersurface ρ of the principal curvatures coincide, then every point belongs to a piece of a ρ-dimensional sphere lying on the surface.

H. Busemann (Copenhagen).

Card 3/3

Author   :
Inst   :
Title   : Furthering the Long Plant and Plan in the Soviet ...

Orig Pub   : Izo readym i urozhay, 1957, No 11, 32-34.

Abstract   : No abstract.

Card 1/1

KOSTYUCHENKO, A.D.; PETROVA, L.I.

Importance of the illuvial horizon in the fertility of
sod Podzols [with summary in English]. Pochvovedenie no.2:
42-49 F '57. (MLRA 10:5)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut l'na.
             (Podzol)

KOSTYUCHENKO, A.D.; LISTVIN, K.S.; FILIPPOV, Yu.N., red.; ROZHDAYKINA, V.K.,
tekhn.red.

[The use of fertilizers on leading collective farms of the
Kalinin Province] Primenenie udobrenii v peredovykh kolkhozakh
Kalininskoi oblasti. [Kalinin] Kalininskoe knizhnoe izd-vo,
1957. 41 p.   (MIRA 11:1)
        (Kalinin Province--Fertilizers and manures)

USSR/Soil Science. Mineral Fertilizers.   I-5

Abs Jour: Referat Zh-Biol., No 6, 25 March, 1957, 22515

Author : Kostyuchenko, A.D.
Inst   :
Title   : Fertilizers for Long-Fiber Flax.

Orig Pub: Udobrenie i urozhai, 1956, No 3, 23-27.

Abstract: From experimental data obtained by the All-Union Flax Institute
          and its affiliates (1931-1954), flax needs increased N, P and K
          in the soil. Of the trace fertilizers, B and Mn are effective,
          as is Ca on turfy and dark-colored soils. It is recommended
          that phosphorus and potassium fertilizers be administered before
          spring plowing or in early spring, and a part of the potassium
          be put into the nutrient at the beginning of flax budding. Nitro-
          genous fertilizers should be administered during soil treatment
          before sowing and into nutrient during the period of "firring".

Card   : 1/2   -30-

KOSTYUCHENKO, Anton Dmitriyevich, kandidat sel'skokhozyaystvennykh nauk;
KATSNEL'SON, S.M., redaktor; FURMAN, G.V., tekhnicheskiy redaktor

[Experience in raising high yields of flax; "Novaia zhizn'" Collective
Farm in Bezhetsk district, Kalinin Province] Opyt polucheniia vyso-
kogo urozhaia l'na; kolkhoz "Novaia zhizn'" Bezhetskogo raiona
Kalininskoi oblasti. Moskva, Izd-vo "Znanie," 1956. 23 p. (Vsesoiuz-
noe obshchestvo po rasprostraneniiu politicheskikh i nauchnykh
znanii. Ser. 5, no.21)   (MLRA 9:9)
        (Flax)

Kostyuchenko, A.D.

USSR/Cultivated Plants - Technical. Oleaginous. Sugar-Bearing.   L-5

Abs Jour   :   Ref Zhur - Biologiya, No 16, 25 Aug 1957, 69295

Author   :   Kostyuchenko, A.D.
Inst   :
Title   :   System of Plant Fertilization in Grass Fields and Flax
                Crop Rotation.

Orig Pub   :   Tr. Vses. n.-i. in-ta l'na, 1955, No 4, 105-118

Abst   :   The results of many years of study by the flax institute
                on the use of fertilizers for flax are stated. The de-
                pendence of effectiveness of different fertilizers on
                the level of agrotechnique, on peculiarities of species
                of flax, on soil and other conditions in grass fields
                and flax crop rotation is explained. Data are given on
                changing different soil properties in districts for
                flax cultivation as an effect of long years of flax
                cultivation.

Card 1/1

KOSTYUCHENKO, A. D., LISTVIN, K. S.,
PETROVA, L. I.

Flax

Application of granulated fertilizers to long-filer flax. Sov. agron. 10 no.
8, 1952.

9. **Monthly List of Russian Accessions**, Library of Congress, September 195$\overline{3}$. Unclassified.

1. KOSTYUCHENKO, A. D., PETROVA, L. I.

2. USSR (600)

4. Lime

7. Doses of lime in grass and flax crop rotation. Agrobiologiia No. 6 1952.

9. Monthly List of Russian Accessions, Library of Congress, April 1953, Uncl.
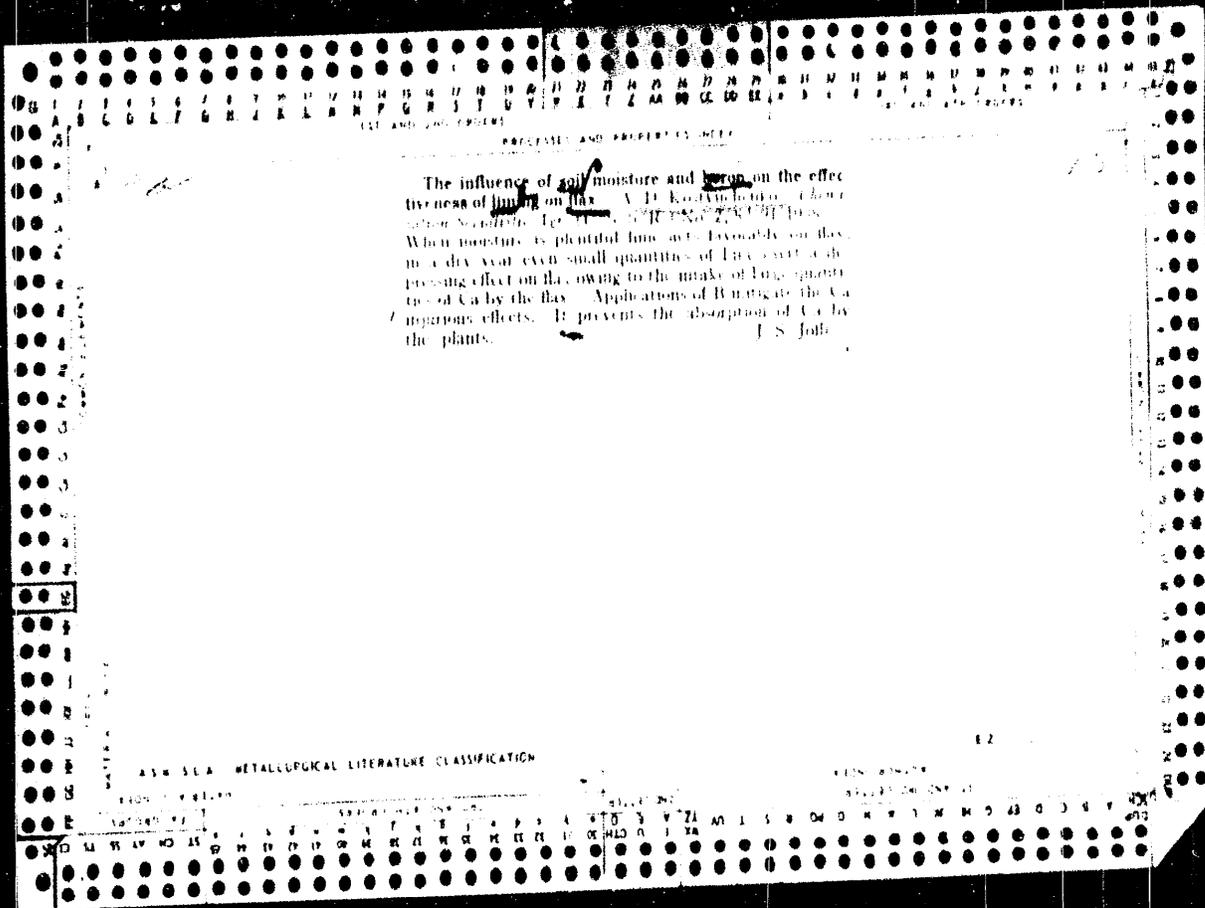
The influence of soil moisture and boron on the effec
tiveness of liming on flax.   A. P. Kostiukovitch Chem
...

When moisture is plentiful lime acts favorably on flax;
in a dry year even small quantities of lime exert a de
pressing effect on flax, owing to the intake of large quanti
ties of Ca by the flax. Applications of B mitigate the Ca
... vigorous effects. It prevents the absorption of Ca by
the plants.   J. S. Joffe

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

KOSTYUCHENKO, A.A. [Kastsiuchenka, A.A.]

Age composition and growth of pike and fishes of the family
Percidae from the Dnieper River (within the White Russian S.S.R.).
Vestsi AN BSSR.Ser.biial.nav. no.3:119-123 '62.   (MIRA 15:12)
          (DNIEPER RIVER--PIKE)   (DNIEPER RIVER--PERCH)

KOSTYUCHENKO, A.A. [Kastsiuchenka, A.A.]

Age groups and growth of principal commercial cyprinoid fishes in
the White Russian section of the Dnieper River. Vestsi AN BSSR.Ser.
biial.nav. no.2:102-111 '62.   (MIRA 15:8)
                              (DNIEPER RIVER--CARP)

DOROSH, M.M.; KOSTYU, Ya.E.; SHKODA-UL'YANOV, V.A.

Highest possible yields of delayed neutrons produced by
certain photonuclear reactions. Atom. energ. 17 no.3:
215-217 S '64. (MIRA 17:9)

DOROSH, M.M.; KOSTYU, Ya.Ye.; SHKODA-UL'YANOV, V.A. [Shkoda-Ul'ianov, V.O.]

Use of the yield of delayed neutrons from a thick water target in determining the reaction cross section $_8O^{18}(\gamma p)_7N^{17}$ beyond the giant resonance region. Ukr. fiz. zhur. 9 no.9:1040-1041 S '64.

(MIRA 17:11)

1. Uzhgorodskiy gosudarstvennyy universitet.

PILIPENKO, A.T.; KOSTYSHINA, A.P.; KUDRITSKAYA, L.N.

Use of thionalide in analysis. Part 1. Determination of the
acid dissociation constant of thionalide and solubility
products of thallium (I), silver, cadmium, and zinc thio-
nalates. Ukr. khim. zhur. 28 no.1:109-112 '62.

(MIRA 16:8)

1. Kiyevskiy gosudarstvennyy universitet im. Shevchenko.

PILIPENKO, A.T.; KOSTYSHINA, A.P.

Use of unithiol in analysis. Part 1: Constants of
acidic dissociation and the long-period stability of
unithiol. Izv.vys.ucheb.zav.;khim.i khim.tekh. 5 no.3:502-503
'62.   (MIRA 15:7)

1. Kiyevskiy gosudarstvennyy universitet imeni Shevchenko,
kafedra analiticheskoy khimii.
        (Propanesulfonic acid)   (Chemistry, Analytical)

PYATNITSKIY, I.V.; KOSTYSHINA, A.P.

Study of hydroxy acid complexes by the solubility method with
the use of extraction. Citric acid complexes with titanium.
Izv. vys. ucheb. zav; khim. i khim. tekh. 3 no. 5:794-797
'60.   (MIRA 13:12)

1. Kiyevskiy gosudarstvennyy universitet imeni T.G. Shevchenko.
Kafedra analiticheskoy khimii.
         (Titanium compounds)   (Citric acid)

PYATNITSKIY, I.V.; KOSTYSHINA, A.P.

Relative stability of copper, cobalt, and bismuth complexes with trioxyglutaric, tartaric, and malic acids in an alkaline medium. Ukr.khim.zhur. 25 no.1:125-128 '59. (MIRA 12:4)

1. Kiyevskiy gosudarstvennyy universitet im. T.G. Shevchenko. (Complex compounds)

SOV/78-4-6-21/44

Comparative stabilities of the Tartaric Acid Complexes of Aluminum, Vanadium, Iron, Titanium, and Copper in Alkaline Medium

distribution coefficient of the aluminum oxyquinolate in chloroform amounts to $K_{distribution} = 2.6.10^{-33}$; $K_{distribution} = 7.3.10^{-23}$ for VO^{2+}; $K_{distribution} = 1.5.10^{-37}$ for Fe^{3+}; and $K_{distribution} = 4.2.10^{-23}$ for Cu^{2+}. The stabilities of the tartaric acid complexes of copper and iron in alkaline media were compared and the results are given in table 2. It was found that the tartaric acid complex of iron is comparatively more stable than that of copper. Furthermore the stabilities of the tartaric acid complexes of aluminum, titanium, vanadium, and iron in ammoniacal solutions were compared. The results are given in table 3. There are 3 tables and 8 references, 7 of which are Soviet.

SUBMITTED: March 18, 1958

Card 2/2

5(2), 5(4)   SOV/78-4-6-21/44
AUTHORS: Pyatnitskiy, I. V., Kostyshina, A. P.

TITLE: Comparative   Stabilities of the Tartaric Acid Complexes of
              Aluminum, Vanadium, Iron, Titanium, and Copper in Alkaline
              Medium (O sravnitel'noy ustoychivosti vinnokislykh kompleksov
              alyuminiya, titana, vanadiya, zheleza, i medi v shchelochnoy
              srede)

PERIODICAL: Zhurnal neorganicheskoy khimii, 1959, Vol 4, Nr 6, pp 1341-1346
              (USSR)

ABSTRACT: The stability of the tartaric acid complexes of aluminum, vana-
              dium, iron, and copper in an alkaline medium was investigated.
              A new method which uses organic solvents as extraction solvents
              is suggested for the determination of the ratio of two different
              metals which are complex-bound: A quantity of precipitants
              which is insufficient for the complete precipitation of the
              two metals is added to a solution of complex compounds of
              two metals and the precipitation is then extracted by organic
              solvents. The metal concentration is determined in the aqueous
              phase. The distribution constants of the oxyquinolate of alu-
              minum, vanadium, iron, and copper were determined by extraction
Card 1/2   with chloroform and the results are given in table 1. The

Comparisons Concerning the Stability of the Tartaric-Acid   78-2-6/43
Complexes of Aluminum, Gallium, Indium and Thallium in Ammonia-Hydroxide
Solutions.

                aluminum and indium are weaker complexes with an almost
                equal stability. An exception is made by the tartaric-acid
                complex of thallium which according to the range of precipi-
                tation of the hydroxide has a pH-value of 2,4. Its stability
                would therefore correspond to the gallium-tartaric complex.
                There are 2 tables and 18 references, 12 of which are Slavic.

SUBMITTED: February 4, 1957

AVAILABLE: Library of Congress

Card 2/2

Kost ... , N

AUTHORS: Pyatnitskiy, I. V., Kostyshina, A P   78-2-6/4?

TITLE: Comparisons Concerning the Stability of the Tartaric-Acid
             Complexes of Aluminum, Gallium, Indium and Thallium in Ammonia-
             -Hydroxide Solutions (O sravnitel'noy ustoychivosti vinnokislykh
             kompleksov alyuminiya, galliya, indiya i talliya v ammiachnykh
             rastvorakh).

ABSTRACT: The present paper investigates the tartaric-acid complexes of
             aluminum, gallium, indium and thallium-/III/ in ammonia
             hydroxide. The investigations show that ammoniacal tartaric-
             -acid solutions of aluminum, gallium and indium are stable
             solutions and do not yield any Tyndall effect, i.e. they are
             no colloidal solutions and diffuse through a cellophane-mem-
             brane. The tartaric-acid solutions of the thallium complex are
             instable and hydrolyze easily. A connection was found to exist
             between the stability of the tartaric-acid complexes of alu-
             minum, gallium and indium and the pH-value of the hydroxide-pre-
             cipitation of these metals. The tartaric-acid complex of gall-
             ium was found to be the most stable complex. The complexes of

Card 1/ 2

KOSTYSHINA, A.Y.

ILLEGIBLE

L̶ o̶ s̶ T̶ Y̶ S̶ H̶ I̶ N̶ A̶, A̶. P̶.

Category: USSR/Analytical Chemistry - General Questions.   G-1

Abs Jour: Referat Zhur--Khimiya, No 9, 1957, 30935

Author : Pyatnitskiy I. V., Kostyshina A. P.
Inst   : not given
Title   : Polarographic Determination of Copper and Bismuth in Tartaric
          Acid Solution

Orig Pub: Ukr. khim. zh., 1956, 22, No 5, 679-686

Abstract: Potentiometric study of the composition and stability of tar-
          taric acid complexes (TC) of Bi and Cu, and description of a
          method that has been developed for a polarographic determina-
          tion of Bi and Cu in tartaric acid solution. Composition of
          TC of Bi and Cu was determined at different concentrations of
          tartaric acid and constant pH. It was found that in the tar-
          taric acid complexes of Bi and Cu one atom of the metal is com-
          bined with one or with two residues of tartaric acid. Equili-
          brium constant of the reaction of Bi-complex formation was cal-
          culated ($K = 2.2 \cdot 10^{-6}$) and also the instability constant of

Card   : 1/2   -14-

ILLEGIBLE

ZHAROVSKII, F.G.; KOSTYSHINA, A.P.

Colorimetric determination of phosphorus in steel by extraction.
Ukr.khim.zhur. 19 no.2:201-204 '53.   (MLRA 7:4)
    (Phosphorus) (Colorimetry) (Steel—Analysis)

KARTYSHOV, V.A., polkovnik

Publication of the work "[...]
Great Patriotic War [...]

KOSTYSHIN, S.S.; MOLOTKOVSKIY, G.Kh.

Effect of different photoperiods on the content of protein, sugars
and dry substance in leaves and roots of corn hybrid between the
Bukovina 3 and its parental forms. Nauch.dokl.vys.shkoly; biol.
nauki no.3:145-148 '65.   (MIRA 18:8)

1. Rekomendovana kafedroy fiziologii rasteniy Chernovitskogo
gosudarstvennogo universiteta.

L 13871-66
ACC NR: AP5028146

tellurite (ZnTe) are similarly photosensitive. Light sensitive layers are pro-
duced by vacuum deposition at pressures on the order of 10^{-4}-10^{-5} cm Hg. The lay-
ers are exposed for a period of from a few minutes to an hour. They are then heat-
ed in an oven for from 5-10 minutes, at temperatures between 100°C and 200°C. The
reaction apparently takes place as a result of the rupture of the electronic bonds
of CuCl. The cuprous and chloride ions react in pairs in the defects of the crystal
lattice and form molecules of chlorine and copper. The atoms of copper are trapped
in the lattice forming the resultant visible image. Heating accelerates the rup-
ture of the bonds of CuCl. By selecting appropriate semiconductive material, layers
can be produced which are sensitive to various portions of the spectrum. Applica-
tions may be found in microphotography. Orig. art. has: 2 figures.

SUB CODE: 20/   SUBM DATE: 25Jun65/   ORIG REF: 000/   OTH REF: 003

Card 2/2 mc

L 13871-66 EWT(1)/EWP(e)/EWT(m)/T/EWP(t)/EWP(b)/EWA(h) IJP(c) JD/AT/WH

ACC NR: AP5028146 SOURCE CODE: UR/0077/65/010/006/0450/0451

AUTHOR: Kostyshin, M. T.; Mikhaylovskaya, Ye. V.; Sandul, G. A.; Romanenko, P. F.

ORG: Institute of Semiconductors AN UkrSSR (Institut poluprovodnikov AN UkrSSR)

TITLE: Photosensitivity of thin semiconductive layers

SOURCE: Zhurnal nauchnoy i prikladnoy fotografii i kinematografii, v. 10, no. 6, 1965, 450-451

TOPIC TAGS: photosensitivity, visible light, semiconducting material

ABSTRACT: CuCl was found to have the same photosensitivity properties as are exhibited by PbI_2. When deposited in thin layers on quartz or glass, these compounds form latent images upon exposure to visible light. These images may be developed on heating. Temperatures required are 180-240°C for PbI_2 and 150-200°C for CuCl. If heated to these temperatures during exposure, the latent images appear on subsequent exposure to radioactivity. The source of light may also serve as the source of heat in developing the latent image. It was shown that other halides are also light sensitive. Compounds of sulfur (As_2S_3, Sb_2S_3, CdS, PbS), selena (As_2Se_3) and

Card 1/2 UDC: 772.93.01

KOSTYSHIN, M.T. [Kostyshyn, M.T.]; ROMANENKO, P.F.

Study of the long-wave boundary of the self-absorption band
in orpiment. Ukr. Fiz. zhur. 9 no.2:166-171 F'64   (MIRA 17:7)

1. Kiyevskiy gosudarstvennyy universitet imeni Shevchenko.

Some optical properties ...

S/185/63/008/001/015/024
D234/D308

ASSOCIATION: Kyyivs'kyy derzhuniversytet im. T. H. Shevchenka
(Kiev State University im. T. H. Shevchenko)

SUBMITTED: July 27, 1962

Card 2/2

KOSTYSHYN, M.T

AUTHORS: Kostyshyn, M. T. and Romanenko, P. F.

TITLE: Some optical properties of orpiment and stibnite

PERIODICAL: Ukrayins'kyy fizychnyy zhurnal, v. 8, no. 1, 1963,
102-105

TEXT: The authors give the results of measurements of absorption coefficients of thin layers of As_2S_3 obtained by evaporation, for 250 - 500 mμ. The absorption coefficient increases smoothly up to 4.2 ev (= about 300 mμ). Single crystals in polarized light, whose electric vector is parallel to the c axis of the crystal, have two absorption maxima at 457 and 436 mμ. If the electric vector is perpendicular to the c axis there is one maximum at 431 mμ. Reflection spectra of orpiment and stibnite in unpolarized light were also measured. The former has maxima at 4.35 and 5.0 ev, the latter at 4.9 ev (distinct, due probably to direct transitions) and at 3.9 ev (blurred, owing probably to indirect transitions). There are 3 figures.

Card 1/2

KOSTYSHIN, M.T.; ROMANENKO, P.F.

Dispersion of certain semiconductors in the region of absorption
bands. Opt.i spektr. 12 no.5:627-631 My '62. (MIRA 15:5)
(Semiconductors—Spectra)

24,7408

S/051/62/012/005/013/021
E032/E514

AUTHORS: Kostyshin, M.T. and Romanenko, P.F.

TITLE: Dispersion of some semiconductors in the region of
           absorption bands

PERIODICAL: Optika i spektroskopiya, v.12, no.5, 1962, 627-631

TEXT: The authors describe a method of measuring the
refractive index as a function of wavelength of solid amorphous
bodies in the region of absorption bands. The specimen is in
the form of a wedge which is set up in front of the exit slit
of a monochromator.   The refractive index is deduced from
measurements on the interference patterns obtained by reflection
from the wedge.   The method is particularly suitable for
substances in which the ratio of the refractive index to the
absorption coefficient is of the order of 3.   The method has
been successfully used to determine the refractive index as a
function of wavelength in the range 400 - 1000 mμ for Se,
$SnSe_2$, $SbSe_3$ and stibnite.   There are 6 figures.

SUBMITTED: April 6, 1961

Card 1/1

The Optical Constants of Germanium in the 2-25 μ Region

SOV/51-5-4-15/21

present paper using the experimental results of Ref 5. The author
discusses two methods of avoiding the effect of the refractive
index on the value of the absorption coefficient (and vice versa)
in calculations of these quantities from experimental data.
One of these methods, based on the transmission data for two
layers, was applied to the results of Ref 3. The calculated
refractive index (curve 1) and absorption coefficient (curve 2) are
shown in Fig 3 for the region 11-25 μ. There are 6 references.

ASSOCIATION: Kiyevskiy gosudarstvennyy universitet im. T.G. Shevchenko (Kiyev
State University imeni T.G. Shevchenko)

SUBMITTED: October 14, 1957

Card 2/2   1. Germanium---Optical properties   2. Mathematics---Applications

AUTHOR: Kostyshin, M.T.   SOV/51-5-3-15/21

TITLE: The Optical Constants of Germanium in the 2-25μ Region (Opticheskiye postoyannyye germaniya v oblasti 2-25μ)

PERIODICAL: Optika i Spektroskopiya, 1958, Vol 5, Nr 3, pp 311-315 (USSR)

ABSTRACT: Brattain and Briggs (Ref 1) were the first to study the optical
             constants of germanium. They showed that the absorption limit
             lies in the near infrared. More precise measurements of absorption
             (Ref 2) showed that at wavelengths longer than 2 μ germanium is
             exceptionally transparent. The transmission curves of very pure
             germanium obtained by Briggs (Ref 3) is shown in Fig 1 for the
             region 1-25 μ. Fig 2 gives the optical constants of germanium in
             the region 2-25μ. Curves 1-4 represent the refractive index.
             Curve 1 represents Briggs's measurements (Ref 1); curve 2 was
             obtained by the present author by an interference method whose details
             are not given; curve 3 shows Simon's measurements (Ref 6) who used
             a photometric method; curve 4 shows the results of calculation based
             on photometric transmission data of Ref 3. Curve 5 of Fig 2 gives
Card 1/2   the absorption coefficient calculated by the method described in the

SOV/51-5-1-12/19

The Infrared Dispersion of Sulphides and Selenides of Certain Metals

while in the region 1-15 μ a spectrometer VIKS-M2 was used.
The dispersion curve obtained using these two instruments in the
infrared agreed well with the visible-region dispersion curve at
the transition between the two spectral regions. The results of
independent measurements of the refractive index using the MII-1
microinterferometer were found to be identical with the results
obtained by the interference method used by the author. The results
obtained are given in Figs 1-6. Fig 1 gives the dispersion curve for
selenium, Fig 2 for PbSe, Fig 3 for SnSe$_2$ (curve 1) and SnSe (curve 2).
Fig 4 for CdS (curve 1) and CdSe (curve 2), Fig 5 for As$_2$S$_3$ (curve 1)
and As$_2$Se$_3$ (curves 2 and 3), and Fig 6 for Sb$_2$S$_3$ (curves 1 and 2) and
Sb$_2$Se$_3$ (curve 3). The author thanks A.A. Shishlevskiy who directed
this work. There are 6 figures and 18 references, of which 7 are English,
5 Soviet, 3 American, 1 German, 1 French and 1 Japanese.

ASSOCIATION: Kiyevskiy gosudarstvennyy universitet(Kiyev State University)

SUBMITTED: September 16, 1957

Card 2/2

1. Metal sulfide films-Spectra 2. Metal sulfide films-Refractive index
3. Metal selenide films-Spectra 4. Metal selenide films-Refractive index
5. Infrared spectroscopy-Applications 6. Interferometers-Applications
7. Spectrum analyzers-Applications

AUTHOR: Kostyshin, M.T.

TITLE: The Infrared Dispersion of Sulphides and Selenides of Certain Metals
             (Dispersiya sul'fidov i selenidov nekotorykh metallov v infrakrasnoy
             oblasti spektra)

PERIODICAL: Optika i Spektroskopiya, 1958, Vol 5, Nr 1, pp 71-77 (USSR)

ABSTRACT: The author used samples 10-100 μ thick produced mainly by vacuum
             condensation. These films were deposited on rock salt, sylvite and
             fluorite. Interference of infrared light was observed in a convergent
             beam. The order of interference was found by the method described
             in Ref 3. When the order of interference was known, the relative
             refractive index could be found. To find the absolute values of the
             refractive index it was necessary to find the film thickness; this
             was done using a microinterferometer MII-1 as described in Ref 4.
             To check the results obtained, dispersion of certain of the substances
             studied was measured up to the visible region where the refractive
             index could be measured by independent method. In the region 0.7-1 μ
             the interference measurements were made using spectrophotometer SF-4,

Card 1/2

KOSTYSHIN, M. T.

25(6)   PHASE I BOOK EXPLOITATION   SOV/2455

Nauchno-tekhnicheskoye obshchestvo priborostroitel'noy promyshlen-
nosti. Ukrainskoye respublikanskoye pravleniye

Novyye metody kontrolya i defektoskopii v mashinostroyenii i pri-
    borostroyenii [doklady Respublikanskoy konferentsii] (New Methods
    of Inspection and Flaw Detection in the Machinery and Instrument-
    manufacturing Industries [Reports of the Conference Held at Kiyev,
    1958]) Kiyev, Gostekhizdat USSR, 1958. 264 p. 4,700 copies printed.

Sponsoring Agency: Akademiya nauk USSR.

Ed.: A. Amelin; Tech. Ed.: P. Patsaltuk; Editorial Board: I.I.
    Greben', B.D. Grozin, A.Z. Zhmudskiy, G.N. Savin (Resp. Ed.), I.D.
    Payperman (Dep. Resp. Ed.), and A.A. Shishlovskiy.

PURPOSE: This book is intended for engineers, scientific workers, and
    technicians dealing with problems of inspection and flaw detection.

COVERAGE: This is a collection of scientific papers presented at a

Card 1/9

conference sponsored by the Academy of Sciences, UkSSR, and the
Nauchno-tekhnicheskoye obshchegtvo priborostroitel'noy promyshlen-
nosti, Ukrainskoye pravleniye (Ukrainian Branch, Scientific and
Technical Society of the Instrument-manufacturing Industry). The
papers deal with modern methods of inspection and flaw detection
used in the machinery- and instrument-manufacturing industries.
The subjects discussed include the use of electron microscopes
in the investigation of metal surfaces; X-ray, gamma-ray, lumines-
cense, magnetic, and ultrasonic methods of flaw detection; use of
radioactive isotopes; X-ray diffraction methods of metal analysis;
and the use of interferometers for measuring length and thickness
and determining the coefficient of linear thermal expansion. No
personalities are mentioned. References follow several of the
papers.

Gurvin, A.K., Engineer, Leningrad NII of Bridges. Ultrasonic

Detection of Flaws in Fillet Welds   143

Shimanenko N.N., V.P. Vasilevskiy, Engineer, and K.A. Dvuchal',
Engineer, Kiyev Electric Welding Institute imeni Ye.O. Paton.
Ultrasonic Detection of Flaws in Electroslag Welds   149

Trushenko, A.A., Engineer, Kiyev Electric Welding Institute imeni
Ye.O. Paton. Testing Welds for Permeability   161

Romanov, X.F., Doctor of Technical Sciences, Professor Leningrad
VNII imeni Mendeleyev. Ways of Improving the Accuracy of the
Interference Method of Measuring Length   173

Kostygin, V.P., and A.A. Shishlovskiy, Kiyev State University
imeni Shevchenko. Use of Millimeter Interferometers for Determin-
ing Thicknesses and Refractive Indices   180

Voloova, Ye.A., Candidate of Technical Sciences, Leningrad
VNII imeni Mendeleyev. Interference Method of Measuring the
Coefficient of Linear Thermal Expansion of Solid Bodies   188

Card 6/9

KOSTYSHIN, M.T. [Kostyshyn, M.T.]

Graphic determination of interference orders. Nauk povid. KDU
no.1:27-28 '56.   (MIRA 11:4)
                    (Interference (Light))

KOSTYSHIN, M. T.

KOSTYSHIN, M. T. -- "The Development of a Method and the Measurement of the Dispersion of the Thin Layers of Selenites and Sulfides of Certain Metals in the Infrared Part of a Spectrum." Min Higher Education Ukrainian SSR, Kiev State U imeni T. G. Shevchenko, Kiev, 1956. (Dissertation for the Degree of Candidate in PHYSICOMATHEMATICAL SCIENCES).

SO: KNIZHNAYA LETOPIS' (Book Register), No. 42, October 1956, Moscow.

BEZRUKOVA, A.A.; KOSTYCHIN, A.I.

Case of unusually large middle nasal conchae. Zhur. ush., nos. i
gor. bol. 24 no.1:86 Ja-F '64.   (MIRA 18-3)

1. Iz otorinolaringologicheskogo otdeleniya (zav.- A.A. Bezrukova)
2-y gorodskoy bol'nitsy g. Khersona.

YAKOVENKO,I.I.; KOSTYSHIN, A.T.

Report on the activities of the Kherson Provinsial Scientific
Society of Otorhinolaryngologists for 1962. Zhur. ush., nos.
i gorl. bol 23 no.5:93-94 S-O'63   (MIRA 17:3)

1. Predsedatel Khersonskogo oblastnogo nauchnogo obshchestva
otolaringologov (for Yakovenko). 2. Sekretar' Khersonskogo
oblastnogo nauchnogo obshchestva otolaringologov (for Kostyshin).

KOSTYSHEVA, A.V.; GUSEYNOV, T.M.; VEZIR-ZADE, F.A.

Hydrochemical characteristics of the layer 5 in the Bibi-Eybat field
and changes in the chemical composition of formation waters resulting
from the injection of sea water. Azerb. neft. khoz. 39 no.10:7-9 O
'60.   (MIRA 13:10)
            (Oil field brines)   (Sea water)

RITS, I.A., kand. med. nauk, (Novosibirsk, Kannskaya ul., d. 11, kv.7)
    KOSTYSHEVA, S.N.

Gastric tuberculosis. Vestn. khir. Grekov. 90 no.4:91-92 Ap'63
                                                        (MIRA 17:2)

1. Iz Novosibirskoy oblastnoy klinicheskoy bol'nitsy (glavnyy
vrach - zasluzhennyy vrach RSFSR Z.A. Kireyeva).

MUSTAFAYEV, M.M.; CHERNOMORDIKOV, M.Z.; KAFAROV, S.A.; KOSTYSHEVA, A.V.

Intensive air injection into layer 5 of the Bibi-Eybat field.
Azerb.neft.khoz. 38 no.1:25-28 Ja '59.   (MIRA 12:4)
        (Apsheron Peninsula--Secondary recovery of oil)

VOROB'YEV, A.I.; KOSTYSHEV, N.M. (Novosibirsk); MYAKISH, N.N., inzh.
(Novosibirsk)

Experience in mechanized track testing. Put' i put.khoz. 7
no.12:8-11 '63.   (MIRA 16:2)

1. Rukovoditel' putsispytatel'noy laboratorii Novosibirskogo
instituta inzhenerov zheleznodorozhnogo transporta (for
Vorob'yev).

KOSTYSHENKOV, S.N., inzhener.

Operation of SEU-4 electrolytic installations. Elek.sta. 27 no.4:
29-31 Ap '56. (MLRA 9:8)
(Electrolysis) (Hydrogen)

L 29142-66   EWT(1)/FCC   GW

ACC NR: AP6018684   SOURCE CODE: UR/0050/66/000/003/0037/0040

AUTHOR: Kostyryachenko, E. I.

ORG: Leningrad Hydrometeorological Institute(Leningradskiy gidrometeorologicheskiy institut)

TITLE: Analysis of atmospheric fronts on a surface weather chart

SOURCE: Meteorologiya i gidrologiya, no. 3, 1966, 37-40

TOPIC TAGS: atmospheric front, meteorology

ABSTRACT: Even experienced weathermen experience great difficulties in analysis of fronts and important errors are made. This is because the identification and analysis of fronts is based primarily on qualitative physical conclusions. This paper represents an effort to find relatively simple parameters which would make it possible to identify the position of atmospheric fronts on surface charts objectively, by performing certain definite computations. The study was made using cases when fronts were clearly expressed and could be clearly analyzed; then the computations were made using unanalyzed charts so that the position of the frontal lines was unknown at the time of computations. It is shown that a variety of characteristics and their combinations can be useful in an analysis of fronts. However, the clearest relationships of the position of the frontal lines were obtained with the isolines which can be drawn by the method described in the paper. $\Delta p = \dfrac{\partial^2 p}{\partial x^2} + \dfrac{\partial^2 p}{\partial y^2}$ The frontal lines pass through the centers of the maximum values delta p and along the axes of ridges extending from these centers. Orig. art. has: 2 figures. /JPRS/

SUB CODE: 04 / SUBM DATE: 26Jun65 / ORIG REF: 001

Card 1/1 CC   UDC: 551.509.3

KOSTYRYA, Viktor Yakovlevich; SVYATITSKAYA, K.P., vedushchiy redaktor;
MUKHINA, E.A., tekhnicheskiy redaktor

[My experience in sharpening drills] Moi opyt zatochki sverl.
Moskva, Gos. Nauchno-tekhn. izd-vo neft. i gorno-toplivnoi lit-ry,
1956. 14 p.   (MLRA 10:6)

1. Master groznenskogo mashinostroitel'nogo zavoda "Krasnyy
molot" (for Kostyrya)
          (Drilling and boring machinery)

RUSLOV, V.N.; KOSTYRYA, V.A.

Sampler for glass batch sampling in depth. Stek. i ker. 22 no.3:39-40 Mr '65. (MIRA 18:10)

1. Nauchno-issledovatel'skiy institut Avtosteklo (NIIAvtosteklo).